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Reply to Office Action of April 6, 2005

### REMARKS

In the April 6, 2005 Office Action, the drawings and specification were objected to, and claims 1-4, 6-9 and 13-29 (i.e. all of the pending elected claims) stand rejected in view of prior art. Claims 5, 10-12 and 30-49 were withdrawn from consideration. Claims 9, 14, 15, 18 and 29 also were rejected for failing to indicate and claim particularly and distinctly the subject matter that Applicants regard as the invention.

## Status of Claims and Amendments

In response to the April 6, 2005 Office Action, Applicants have amended the title, specification, drawings and claims 1-4, 6-15, 19-22 and 25-32 as indicated above. Also, Applicants have cancelled claims 5, 16-18, 23, 24 and 33-49 and added new claims 50-71 as indicated above. Thus, claims 1-4, 6-15, 19-22, 25-32 and 50-71 are pending, with claims 1, 13, 62, 63, 64 and 69 being the only independent claims. Reexamination and reconsideration of the pending claims are respectfully requested in view of above amendments and the following comments.

# Election of Species

On page 2 of the Office Action, Applicants' election without traverse of the March 1, 2005 Response was acknowledged. Thus, non-elected claims 5, 10-12 and 30-49 were withdrawn from further consideration. Of non-elected claims 5, 10-12 and 30-49, claims 5 and 33-49 have been cancelled. However, Applicants respectfully request that the remaining pending non-elected claims 10-12 and 30-32 be rejoined in this application upon allowance of a generic or linking claim, or claims. Non-elected claims 10-12 and 30-32 depend from claims 1 and 13, respectively, which Applicants now believe are allowable as explained below. New claims 50-71 are all believed to read on the elected Species I illustrated in Figures 1-14.

### **Drawings**

On pages 2 and 3 of the Office Action, the drawings were objected to as failing to comply with 37 CFR §1.84(p)(5), and corrected drawing sheets in compliance with 37 CFR §1.121(d) are required. In response, attached are three (3) substitute sheets of drawings including changes to Figures 1, 2 and 3. Specifically, reference numeral "10" has been added to Figure 1, reference characters "16a" and "20a" have been removed from Figure 2, and one of the reference numerals "44" has been changed to "40" in Figure 3. Applicants believe that

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the drawings now comply with 37 CFR §1.84(p)(5). Accordingly, Applicants respectfully request withdrawal of the objections.

## **Specification**

On pages 3 and 4 of the Office Action, the specification was objected to for informalities in paragraph [0050] and for failing to comply with 37 CFR §1.75(d)(1) and MPEP §608.01(o). In response, Applicants have amended the specification to correct the informalities in paragraph [0050] and amended independent claim 1 to remove the allegedly unsupported terminology (i.e. to provide proper antecedent basis for the limitations of claim 1). Also, Applicants have amended the specification to and claims for consistency with each other. Finally, the title has been changed to be consistent with the claims, as now amended.

Applicants believe that the specification is now correct and complies with 37 CFR §1.75(d)(1) and MPEP §608.01(o). Accordingly, withdrawal of the objections is respectfully requested.

## Claim Rejections - 35 U.S.C. §112

On pages 4 and 5 of the Office Action, claims 9, 14, 15, 18 and 29 were rejected under 35 U.S.C. §112, second paragraph. In response, Applicants have cancelled claim 18, amended claims 9 and 29 and the specification to clarify that these claims require a clicking structure for consistency and clarity, and amended claims 13-15 to eliminate any inaccuracies and/or lack of antecedent basis. Applicants believe that the claims now comply with 35 U.S.C. §112, second paragraph. Accordingly, withdrawal of the rejections is respectfully requested.

# Rejections - 35 U.S.C. § 102

On pages 5 and 6 of the Office Action, claims 1-3 and 6-8 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,015,036 to Fukuda (hereinafter "the Fukuda patent"), and claims 1-4 and 7-9, 13, 17, 19, 20 and 27-29 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,653,649 to Watarai (hereinafter "the Watarai patent"). In response, Applicants have amended independent claims 1 and 13 to more clearly define the present invention over the prior art of record.

Claims 1-4 and 6-9

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Independent claim 1 now requires an electrical shift control switch fixedly mounted to the brake lever, the electrical shift control switch including an operating member arranged and configured to rotate relative to the brake lever between a first actuating position and a second actuating position about a pivot axis that is substantially parallel to the brake operating plane, the pivot axis being stationary relative to the brake lever. Clearly, this structure is *not* disclosed or suggested by the Fukuda patent, the Watarai patent or any other prior art of record.

Specifically, the Watarai patent discloses a rotatable electrical operating member mounted to the bracket that moves about a pivot axis perpendicular to the brake operating plane, not fixedly mounted to the brake lever to rotate about a pivot axis substantially parallel to the brake operating plane. Moreover, while the Fukuda patent discloses an electrical toggle switch mounted to the brake lever to pivot about a pivot axis substantially parallel to the brake operating plane, the pivot axis of the Fukuda patent floats. In other words, the pivot axis of the operating member in the Fukuda patent is not stationary relative to the brake lever. Accordingly, neither the Fukuda patent nor the Watarai patent disclose all of the features of independent claim 1, as now amended. It is well settled under U.S. patent law that for a reference to anticipate a claim, the reference must disclose each and every element of the claim within the reference. Therefore, Applicants respectfully submit that claim 1, as now amended, is not anticipated by the prior art of record. Withdrawal of the rejections of this claim is respectfully requested.

Moreover, Applicants believe that dependent claims 2-4 and 6-9 are also allowable over the prior art of record in that they depend from independent claim 1, and therefore are allowable for the reasons stated above. Also, dependent claims 2-4 and 6-9 are further allowable because they include additional limitations. Thus, Applicants believe that since the prior art of record does not anticipate the independent claim 1, neither does the prior art anticipate dependent claims 2-4 and 6-9. Accordingly, Applicants respectfully request withdrawal of the rejections of these dependent claims.

### Claims 13, 19, 20 and 27-29

Independent claim 13 now requires an electrical shift control switch <u>fixedly mounted</u> to the brake lever, the electrical shift control switch <u>including an</u> operating member arranged

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and configured to rotate relative to the brake lever about a <u>pivot</u> axis that is not perpendicular to the brake operating <u>plane</u>, the operating <u>member including first and second actuating</u> <u>protrusions protruding outwardly with the first actuating protrusion having a first free end located farther from the pivot axis than a second free end of the second actuating protrusion.</u>
Clearly, this structure is *not* disclosed or suggested by the Watarai patent or any other prior art of record.

Specifically, the Watarai patent discloses a rotatable electrical operating member mounted to the bracket *that moves about a pivot axis perpendicular to the brake operating plane*. Also, the operating member of the Watarai patent lacks actuating protrusions with their free ends spaced different distances from the pivot axis, as currently claimed. Accordingly, the Watarai patent fails to disclose all of the features of independent claim 13, as now amended. It is well settled under U.S. patent law that for a reference to anticipate a claim, the reference must disclose each and every element of the claim within the reference. Therefore, Applicants respectfully submit that claim 13, as now amended, is not anticipated by the prior art of record. Withdrawal of this rejection is respectfully requested.

Moreover, Applicants believe that dependent claims 19, 20 and 27-29 are also allowable over the prior art of record in that they depend from independent claim 13, and therefore are allowable for the reasons stated above. Also, dependent claims 19, 20 and 27-29 are further allowable because they include additional limitations. Thus, Applicants believe that since the prior art of record does not anticipate the independent claim 13, neither does the prior art anticipate dependent claims 19, 20 and 27-29. Accordingly, Applicants respectfully request withdrawal of the rejection of these dependent claims.

# Rejections - 35 U.S.C. § 103

On pages 6 and 7 of the Office Action, claims 6, 14-16, 18 and 21-26 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the Watarai patent in view of the Fukuda patent. In response, Applicants respectfully traverse this rejection, especially in view of the amendments to independent claims 1 and 13 described above.

Basically, Appellants believe that (1) one of ordinary skill in the art at the time the invention was made would not combine the references in the manner suggested in the outstanding Office Action; and (2) even if the references were combined, in the manner

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suggested in the outstanding Office Action, such a hypothetical combination would not result in a hypothetical device including all of the limitations of independent claims 1 and 13, especially as now amended. These arguments are explained in more detail below.

With respect to point (1), one of ordinary skill in the bicycle art would <u>not</u> utilize the electric lever switch of the Fukuda patent on the shift/brake device of the Watarai patent because the device of Watarai is designed to be mounted in a different location than the device of Fukuda, where the riders hands are positioned quite differently. The difference in rider hand positions when using these different devices of the Fukuda patent and the Watarai patent would make such a hypothetical additional switch provided on the lever of Watarai either (a) very difficult to operate if mounted to the bottom side of the lever, or (b) very easily accidentally operated during braking if mounted on the top side of the lever. Thus, one of ordinary skill in the art would <u>not</u> add the lever switch of the Fukuda patent to the lever of the Watarai patent, because such a modification would create a more complicated, heavy device with an additional switch that is basically unusable or easily accidentally operated during braking. In other words, a rider using the device of the Watarai patent would not be well served by an additional switch on the lever such as disclosed in the Fukuda patent. Accordingly, there is no suggestion or motivation to add the lever switch of the Fukuda patent onto the device of the Watarai patent, as suggested in the Office Action.

Regarding point (2), Appellants believe that even if these references were combined, as suggested in the Office Action, such a hypothetical device would not meet all of the limitations of independent claims 1 and 13. Specifically, neither the Fukuda patent nor the Watarai patent disclose the stationary pivot axis of the operating member that is substantially parallel to the brake operating plane, as now required by independent claim 1. Moreover, neither the Fukuda patent nor the Watarai patent disclose the operating member including first and second actuating protrusions protruding outwardly with the first actuating protrusion having a first free end located farther from the pivot axis than a second free end of the second actuating protrusion, as now required by independent claim 13. Thus, even if these references were combined as suggested in the Office Action, it would not result in the present invention, as described in independent claims 1 and 13.

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It is well settled in U.S. patent law that the mere fact that the prior art can be modified does *not* make the modification obvious, unless the prior art *suggests* the desirability of the modification. Accordingly, the prior art of record lacks any suggestion or expectation of success for combining the patents to create the Applicants' unique arrangements of independent claims 1 and 13. Thus, the prior art of record lacks any suggestion or expectation of success for combining the patents to create the Applicants' unique arrangements of dependent claims 6, 14, 15 and 21-26, which further limit their respective independent claims. Therefore, Applicants respectfully request that this rejection be withdrawn in view of the above comments and amendments.

#### **Prior Art Citation**

On page 7 of the Office Action, additional prior art references were made of record. Applicants believe that these references do not render the claimed invention obvious.

Also, on page 7 of the Office Action, the Office Action indicates that the Mavic Publication cited in the January 21, 2004 Information Disclosure Statement could not be located, and an additional copy be provided. In response, Applicants submit herewith a RESUBMISSION OF MISSING PRIOR ART DOCUMENT with a copy of the Mavic All Catalogue 1999 publication cited in the January 21, 2004 Information Disclosure Statement attached thereto.

### New Claims

New claims 50-71 have been added by the current Amendment with new claims 62, 63, 64 and 69 being independent claims. New claims 50-71 are all believed to read on the elected Species I illustrated in Figures 1-14.

New claims 50-55 depend from independent claim 13. Thus, new claims 50-55 are believed to be allowable for the reasons discussed above with respect to independent claim 13. Also, new claims 50-55 include additional limitations, which are not believed to be disclosed or suggested in the prior art.

New claims 56-61 depend from independent claim 1. Thus, new claims 56-61 are believed to be allowable for the reasons discussed above with respect to independent claim 1. Also, new claims 56-61 include additional limitations, which are not believed to be disclosed or suggested in the prior art.

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New independent claim 62 is directed to a shift and brake control device with an electrical shift control switch fixedly mounted to the brake lever, the electrical shift control switch including a uniquely shaped operating member with a first actuating protrusion having a first free end spaced from the pivot axis and a second actuating protrusion having a second free end spaced from the pivot axis, at least one of the first and second actuating protrusions lying completely between the outer lateral surfaces of the brake lever when the operating member is in the rest position. Applicants do not believe the uniquely shaped operating member set forth in claim 62 is disclosed or suggested in the prior art.

New independent claim 63 is directed to a shift and brake control device with an electrical shift control switch fixedly mounted to the brake lever, the electrical shift control switch including a uniquely shaped operating member with a first actuating protrusion having a first free end spaced from the pivot axis and a second actuating protrusion having a second free end spaced from the pivot axis, the first and second free ends being circumferentially spaced from each other within an arc no larger than 180 degrees as measured about the pivot axis. Applicants do not believe the uniquely shaped operating member set forth in claim 63 is disclosed or suggested in the prior art.

New independent claim 64 is directed to a shift and brake control device with a unique electrical shift control switch having a first movable contact that is arranged to remain stationary relative to the operating member when the second movable contact is moved, and a second movable contact being arranged to remain stationary relative to the operating member when the first movable contact is moved. Claim 64 is similar to original claim 27, but more clearly reciting the arrangement of the movable contacts. Applicants do not believe the unique electrical switch set forth in claim 64 is disclosed or suggested in the prior art.

New dependent claims 65-68 depend from new independent claim 64. Thus, new claims 65-68 are believed to be allowable for the reasons discussed above with respect to independent claim 64. Also, new claims 65-68 include additional limitations, which are not believed to be disclosed or suggested in the prior art.

New independent claim 69 is directed to a shift and brake control device with a unique operating member of the electrical shift control switch including a shaft having an outer end with a user engagement element coupled thereto and an inner end configured and arranged to

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selectively move a pair of movable contacts into engagement with a pair of stationary contacts. Applicants do not believe the unique operating member set forth in claim 69 is disclosed or suggested in the prior art.

New dependent claims 70-71 depend from new independent claim 64. Thus, new claims 70-71 are believed to be allowable for the reasons discussed above with respect to independent claim 69. Also, new claims 70-71 include additional limitations, which are not believed to be disclosed or suggested in the prior art.

In view of the foregoing amendment and comments, Applicants respectfully assert that claims 1-4, 6-15, 19-22, 25-32 and 50-71 are now in condition for allowance. Reexamination and reconsideration of the pending claims are respectfully requested. If there are any questions regarding this Amendment, please feel free to contact the undersigned.

Respectfully submitted,

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# **AMENDMENTS TO THE DRAWINGS:**

The attached three (3) sheets of drawings including changes to Figures 1, 2 and 3. These sheets, which include Figures 1-4, replace the original sheets including Figures 1-4.

Attachment: three (3) replacement sheets